



Attorney Docket OHG 135

IN THE CLAIMS

1. (canceled)

2. (currently amended): ~~The semiconductor substrate surface protection method~~

The method of maintaining a clean surface of a semiconductor substrate according to claim [[1]] 26, wherein said high-molecular-weight straight-chain organic compound is selected from substances of boiling point lower than 500 °C.

3. (currently amended): ~~The semiconductor substrate surface protection method~~

The method of maintaining a clean surface of a semiconductor substrate according to claim [[1]] 26, wherein said high-molecular-weight straight-chain organic compound is a compound of a single type.

4. (currently amended): ~~The semiconductor substrate surface protection method~~

The method of maintaining a clean surface of a semiconductor substrate according to claim [[1]] 26, wherein said high-molecular-weight straight-chain organic compound is cholesterol (C₂₇H₄₆O).

5. (currently amended): ~~The semiconductor substrate surface protection method~~

The method of maintaining a clean surface of a semiconductor substrate according to claim [[1]] 26, wherein said high-molecular-weight straight-chain organic compound is behenic acid (C₂₁H₄₃COOH).

6.-18. (canceled)

19. (currently amended): ~~The semiconductor substrate surface protection method~~
according to ~~claim 1~~,

The method of maintaining a clean surface of a semiconductor substrate according to claim 26, wherein the subsequent high-temperature step includes one of thermal oxidation and reduced pressure CVD.

20.- 25. (canceled)

26. (new): A method of abruptly reducing a probability of organic substances of low molecular weight adsorbing onto a surface of a semiconductor substrate during processing, and of maintaining a highly clean surface of the semiconductor substrate, prior to a subsequent processing step, in a condition in which the surface is not deposited with the organic substances of low molecular weight; the method comprising sequentially:

(a) initially depositing and coating the highly clean surface of the semiconductor substrate with a high-molecular-weight organic substance comprising chemical protection, during washing or immediately after the highly clean surface of the semiconductor substrate has been generated;

wherein the high-molecular-weight organic substance does not easily evaporate from the surface even when the substrate is left to stand at ordinary temperature, and boils at a high temperature of the subsequent processing step that is greater than or equal to 233 °C; and

(b) removing the high-molecular-weight organic substance by boiling at the high temperature of the subsequent processing step;

whereby a surface condition of the semiconductor substrate after a clean surface is obtained is maintained without requiring a mini-environment or a method of organic substance removal.

27. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 26, comprising initially coating the surface of the semiconductor substrate with a uniform disposition of the high-molecular-weight organic substance.

28. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 26, wherein the high-molecular-weight organic substance comprises a straight-chain organic compound of a single type.

29. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 28, wherein the a straight-chain organic compound is a compound containing

the COOH group, whereby benefit of a more uniform disposition onto the surface of the semiconductor substrate is provided.

30. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 26, wherein the high-molecular-weight organic substance comprises an organic oxide.

31. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 26, wherein the straight-chain organic compound does not contain unsaturated bonds.

32. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 26, wherein the step of depositing and coating the highly clean surface of the semiconductor substrate with a high-molecular-weight organic substance is performed during washing, and is not performed immediately after the highly clean surface of the semiconductor substrate has been generated.

33. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 26, wherein the step of depositing and coating the highly clean surface of the semiconductor substrate with a high-molecular-weight organic substance is not performed during washing, and is performed immediately after the highly clean surface of the semiconductor substrate has been generated.

34. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 33, wherein the step of depositing and coating the highly clean surface of the semiconductor substrate with a high-molecular-weight organic substance comprises spin coating in which liquid containing the high-molecular-weight straight-chain organic compound and pure water is discharged from a spray nozzle while rotating the semiconductor substrate.

35. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 34, wherein said high-molecular-weight straight-chain organic compound is selected from substances of boiling point lower than 500°C.

36. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 34, wherein said high-molecular-weight straight-chain organic compound is a compound of a single type.

37. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 34, wherein said high-molecular-weight straight-chain organic compound is cholesterin ($C_{27}H_{46}O$).

38. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 34, wherein said high-molecular-weight straight-chain organic compound is behenic acid ($C_{21}H_{43}COOH$).

39. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 34, wherein, after deposition of said high-molecular-weight straight-chain organic compound onto the clean surface of the semiconductor substrate, said high-molecular-weight straight-chain organic compound is further eliminated by the heat treatment temperature.

40. (new): The method of maintaining a clean surface of a semiconductor substrate according to claim 34, wherein the high-temperature step includes one of thermal oxidation and reduced pressure CVD.